

StrongSchoolsNC What Are We Learning About Children and COVID-19?

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We are learning more every day regarding COVID-19 in children. We are using the latest research to help NC make decisions about how we should operate our schools during the COVID-19 pandemic. We will continue to follow new data and science as it is available to learn more. **The current research summarized below still presents an early and limited picture of children and schools during the COVID-19 pandemic.** Be sure to check back for regular updates by visiting https://www.nc.gov/covid19.

Children may be less likely to have and spread COVID-19 than adults

- Children, particularly younger children, may be less likely than adults to become infected with COVID-19, even after being exposed to someone with COVID-19.
- Newer findings suggest that adolescents and adults may be equally likely to become infected
- Newer findings suggest that because of mild to no symptoms, there may be an undercount of actual number children infected and more cases in children have been detected recently.
- Young children can spread the virus, however children under 10 years of age may be less likely to spread COVID-19 to others than older teens and adults.
- Newer findings suggest that younger children may be more likely to get COVID-19 from an adult than to spread an
 infection to an adult
- Spread of COVID-19 is more likely within a household than not within a household (such as school)

Most children have very mild illness with COVID-19, but some have more severe symptoms and we are learning more about children who are at higher risk for infection or more severe illness

- Children infected with COVID-19 generally have mild or no symptoms.
- Although rare, some children can have severe disease, need hospitalization, and have developed multisystem inflammatory syndrome (MIS-C) after exposure to SARS-CoV-2.
- Children with underlying medical conditions are at increased risk of severe illness from COVID-19.
- Our African American and LatinX communities and children are disproportionally affected by COVID-19.

Data from other countries does not show a large spread of COVID-19 associated with schools being open for instruction

- International data that are available show limited transmission in schools when a child was infected.
- While there have been some specific examples of spread in school, schools have not seemed to play a major role in the spread of COVID-19, especially in areas with low viral transmission, and few school outbreaks have been reported.
- Overall, countries that have reopened their schools after infection rates had gone down did not see large rises in infection at a population level.

Less than 6 feet of social distancing may still be protective for children

- The CDC still recommends 6 feet of social distancing as the most health-protective distancing.
- However, in low- and medium-risk settings, 3 feet of social distancing may lead to a similar risk for the spread of COVID-19, especially when people wear cloth face coverings. Because of decreased risk of spread among children, schools may be considered low or medium risk.
- Keeping students spread out with more space in between them provides additional protection.

Learn More

Children may be less likely to have and spread COVID-19 than adults, but we are learning more about children's ability to spread the virus

<u>CDC, MMWR: Morbidity Mortality Weekly Report,</u> <u>Coronavirus Disease 2019 in Children — United States;</u> <u>February 12–April 2, 2020.</u>

<u>Cluster of COVID-19 in northern France: A retrospective</u> closed cohort study. April 23, 2020

SARS-CoV-2 infections in primary schools in northern France: A retrospective cohort study in an area of high transmission. June 29, 2020.

CDC, Reported laboratory-confirmed COVID-19 cases and estimated cumulative incidence, by sex and age group — United States; January 22–May 30, 2020

DA International, Hospital Admission in Children and Adolescents With COVID-19, Early results from a national survey conducted by the German Society for Pediatric Infectious Diseases; May 5, 2020

World Health Organization, Considerations for school-related public health measures in the context of COVID-19; May 10, 2020

BMJ Global Health, Reduction of secondarytransmission of SARS-CoV-2 in households byface mask use, disinfection and social distancing: a cohort study in Beijing, China; May 11, 2020

Children are unlikely to be the main drivers of the COVID-19 pandemic—a systematic review. May 19,2020

Preprint. MedRxiv, Susceptibility to and transmission of COVID-19 amongst children and adolescents compared with adults: a systematic review and meta-analysis; May 24, 2020

CDC, COVID 19 Information for Pediatric Health Care Providers; May 29, 2020

<u>Prevent Epidemics, COVID-19 Weekly Science Review:</u> June 20-26, 2020

Nature, Coronavirus disease 2019 (COVID-19) in children and/or adoles cents: a meta-analysis; June 17, 2020

Science, Changes in contact patterns shape the dynamics of the COVID-19 outbreak in China; June 26, 2020

Centers for Disease Control and Prevention; Preparing K-12 School Administrators for a Safe Return to School in Fall 2020. Updated July 23, 2020

Centers for Disease Control and Prevention, Morbidity and Mortality Weekly Report (MMWR) Hospitalization Rates and Characteristics of Children Aged < 18 years Hospitalized with Laboratory-Confirmed COVID-19 COVID-NET, 14 States, March 1-July 25, 2020

BMJ Contact tracing during Phase 1 of the COVID-10 pandemic in the Province of Trento, Italy: key findings and recommendations. July 29, 2020

School Opening across globe suggest ways to keep coronavirus at bay, despite outbreaks. July 7, 2020

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Children and Fecal SARS-CoV-2 shedding: Just the tip of the lceberg of Italian COVID-19 outbreak? Digestive and Liver Disease July 18, 2020

Balancing the Risks of Pupils Returning to Schools; Royal Society DELVE Initiative; July 24 2020

Children and COVID-19: State Data Report. A joint report from the American Academy of Pediatrics and Children's Hospital Association. July 30, 2020

<u>COVID-19 in Children and the Dynamics of Infection in</u> Families Pediatrics July 2020

JAMA Pediatric Age-Related Differences in Nasopharyngeal Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Levels in Patients with Mild to Moderate Coronovirus Disease 2019 (COVID-19) July 30, 2020

American Academy of Pediatrics, COVID-19 Planning Considerations: Guidance for School Re-entry; June 25, 2020, Updated 8/19/20

Transmission of SARS-Co-V-2 in the United States, August 3, 2020

<u>Household Transmission of SARS-CoV-2 in the United States, August 16, 2020</u>

<u>Transmission Dynamics of COVID-19 Outbreaks Associated</u> with Child Care Facilities – Salt Lake City. Utah, April – July 2020, September 18, 2020

Viner RM, Mytton OT, Bonell C, et al. Susceptibility to SARS-CoV-2 Infection Among Children and Adolescents Compared With Adults: A Systematic Review and Meta-analysis. JAMA Pediatr. Published online September 25, 2020. doi:10.1001/jamapediatrics.2020.4573

National Trends of Cases of COVID-19 in Children Based on US State Health Department Data Pediatrics, Sept 29, 2020

COVID-19 Trends Among School-Aged Children – United States, March 1-September 19, 2020. Morbidity and Mortality Weekly Report (MMWR) September 28, 2020

Most children have very mild illness with COVID-19, but some have more severe symptoms and we are learning more about children who are at higher risk for infection or more severe illness

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<u>COVID-19 Associated Multisystem Inflammatory Syndrome in</u> <u>Children – United States, March – July 2020, August 7, 2020</u>

Hospital Admission in Children and Adolescents With COVID-19. Early results from a national survey conducted by the German Society for Pediatric Infectious Diseases (DGPI). May 2020

<u>Multisystem Inflammatory Syndrome in US Children and Adoles cents. N Engl J Med. July 23, 2020</u>

Health Department-Reported Cases of Multisystem
Inflammatory Syndrome in Children (MISC-C) in the United
States, October 2, 2020

Children and Fecal SARS-CoV-2 shedding: Just the tip of the Iceberg of Italian COVID-19 outbreak? Digestive and Liver Disease July 18, 2020

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School Opening across globe suggest ways to keep coronavirus at bay, despite outbreaks. July 7, 2020

Data from other countries, for the most part, does not show a large spread of COVID-19 associated with schools being open for instruction

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<u>Lancet Child Adolescent Health. Transmission of SARS-CoV-2 in Australian education settings: a prospective cohort study August 3. 2020</u>

<u>Cluster of COVID-19 in northern France: A retrospective closed cohort study. April 23, 2020</u>

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NCIRS, COVID-19 in schools- the experience in NSW;
April 26, 2020

<u>Surveillance of COVID-19 school outbreaks, Germany,</u> Marchto August 2020

<u>Learning Policy Institute, Reopening Schools in the Context of COVID-19: Health and Safety Guidelines from other</u>
Countries, May 15 2020

Less than 6 feet of social distancing may still be protective for children

A large COVID-19 outbreak in a highschool 10 days after schools' reopening, Israel, May 2020. Euro Surveill.

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<u>Prevent Epidemics, COVID-19 Weekly Science Review; June 20-26, 2020</u>

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<u>Center for Global Development, Back to School: An update on COVID cases as schools reopen; June 12, 2020</u>

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Considerations: Guidance for School Re-entry, June 25, 2020